

WHAT IS CLAIMED IS:

1. A method for forming a substantially haze-free BST film, comprising:
supplying BST sources into a chamber;
heating the chamber to a temperature above about 600°C; and
depositing the BST film at a rate of between about 10 and about 100 Å/min.
2. The method of Claim 1, wherein the BST film is deposited at a rate of less than about 80 Å/min.
3. The method of Claim 1, wherein the chamber is heated to a temperature between about 600°C and 680°C.
4. The method of Claim 1, wherein the substrate is heated to a temperature of about 500 to 580 °C.
5. The method of Claim 1, further comprising depositing an electrode material before depositing said BST film.
6. The method of Claim 5, further comprising heating the substrate to a temperature of about 500 to 550 °C before depositing said electrode material.
7. The method of Claim 1, wherein the resulting BST film comprises about 50 to 53.5 atomic percent titanium.
8. The method of Claim 7, wherein the resulting BST film comprises about 52 to 53 atomic percent titanium.
9. A method for forming a substantially haze-free BST film, comprising:
supplying BST sources into a chamber and depositing a BST film at a rate of between about 10 and about 100 Å/min.
10. A method for forming a substantially haze-free BST film, comprising:
supplying BST sources into a chamber; and
depositing a BST film at a rate of between about 10 and about 100 Å/min until a BST film having a thickness of about 150 to 300 Å is formed.
11. The method of Claim 10, wherein the BST film is deposited at a rate of 80 Å/min.
12. The method of Claim 10, further comprising forming a first electrode below the BST film, and forming a second electrode above the BST film.

13. The method of Claim 10, further comprising heating the substrate to a temperature of about 500 to 550 °C before depositing said electrode material.

14. The method of Claim 10, wherein the BST film comprises about 50 to 53.5 atomic percent titanium.

15. The method of Claim 10, wherein the BST film comprises about 52 to 53 atomic percent titanium.